

# **GENERAL INFORMATION**

## ***Place And Date***

The Twenty-Second Symposium on Naval Hydrodynamics will be held 9-14 August 1998 at the National Academy of Sciences, 2101 Constitution Avenue NW, Washington, D.C. The Academy is about a 10 - 20 minute walk from the Foggy Bottom Metro Station and approx. a \$3.00 cab ride from the hotels listed. Buses for the social events will pick up riders at the Foggy Bottom Metro Station.

## ***Language***

The conference language is English. All presentations will be in English and no translation service will be available.

## ***Weather***

Normally the weather in Washington, D.C. in August is warm and humid. The temperature may vary between 90-95 degrees F (32 -35 degrees C).

## ***Proceedings And Preprints***

Preprints will be handed out to the participants at registration. Proceedings will be published later. Both preprints and proceedings are included in the registration fee.

## ***Special Needs Requirements***

If there are any special needs requirements including special dietary requests, please contact Kay Adams on 301-227-1612 or Janice Powell on 301-227-1588 at the Carderock Division, Naval Surface Warfare Center fax: 301-227-3679.

email: kadams@oasys.dt.navy.mil  
powellj@oasys.dt.navy.mil

## ***Personal Invitation***

If you require a personal invitation to attend the Conference, please contact Kay Adams or Janice Powell, Carderock Division, Naval Surface Warfare Center.

Phone: 301-227-1612 or 301-227-1566, Fax: 301-227-3679.

# **REGISTRATION INFORMATION**

## ***Registration Fee - \$400.00***

The fee includes preprints, proceedings, breakfast, lunch and coffee during the conference, the reception, the evening tour, the barbecue picnic, tour of David Taylor Model Basin and the banquet.

## ***Student Registration Fee - \$275.00***

Students are allowed a reduced registration which includes admittance to all sessions, preprints, lunch and coffee during the conference, reception and picnic.

Please include proof of student status with your registration form.

## ***Late Registration Fee - \$475.00 (after 1 June 1998)***

## ***Payment***

Payment should be remitted in U.S. dollars. Please ensure the organizer is paid the full conference fee and state the name(s) of the participant(s).

Please fill in the proper information on the registration form.

Please note that both the registration form and payment must be received by 30 Jun 1998.

Checks must be payable to the NAS/22nd ONR Symp. and mailed to:

Kay Adams (Code 5012)

Carderock Division, Naval Surface Warfare Center

9500 MacArthur Blvd

West Bethesda, MD 20817-5700.

## ***Cancellation***

Cancellations must be in writing to Kay Adams before 30 Jun 1998. For cancellations on or after this date, the fees are non-refundable. Substitutes will be accepted at any time.

If a tour has to be canceled due to lack of interest, all fees will be refunded in full.

# ACCOMMODATION

Participants are responsible for making their own hotel reservations.

Blocks of rooms have been reserved at the first three hotels listed in the brochure at special rates. Rooms will be released 8 July 1998. Thereafter, reservations can be obtained only on a space available basis. Special rates will not necessarily apply if reservations are made later than July 8, 1998.

There are other hotels in the area and some of them have also been listed in the brochure, but their rates have not been guaranteed.

All rooms must be guaranteed with a credit card. When making a reservation, make sure you mention you are attending the 22nd ONR Hydrodynamics Symposium, except at the State Plaza ask for Group 3535.

Room rates do not include a 13% tax or a \$1.50-\$3.00 room tax per day. Hotel expenses will be settled directly with the hotel.

The State Plaza is approximately two blocks from NAS. The others are about a 20 minute walk or \$3.00 taxi fare.

# **SOCIAL EVENTS**

## ***Registration and Reception Sun., 9 August 1998***

(included in registration)

6:00 p.m. - 8:00 p.m.: Reception and Pre-registration will be held at the Navy Museum at the Washington Navy Yard, 901 M Street SE, Washington, DC 20374-5060. The Navy Museum is next to David Taylor's first Experimental Model Basin.

Reception will offer a cash bar and heavy Hors d'Oeuvres. Bus transportation will be available from the Foggy Bottom Metro Stop at 5:30 p.m. and depart the Navy Yard at 8:00 p.m. All participants and their accompanying persons are invited to attend the Reception. Registration will resume the following morning at the National Academy of Sciences.

## ***Washington by Twilight Tour #3 Tues., 11 August 1998***

7:30 p.m. - 10:30 p.m.: See the city at dusk. Tour the illuminated memorials and beautifully lighted Capitol dome. View the White House and Watergate complex. Go to the Kennedy Center roof-top terrace for a view of Washington, Virginia and the Georgetown Waterfront. Visit the Lincoln, Jefferson, Vietnam, and Korean War Memorials. Begins 7:30 p.m. Finish 10:45 p.m.

## ***Picnic and Tour of the David Taylor Model Basin Wed., 12 August 1998***

Morning 1/2 day Session at NAS

Following the morning session, at 2:00 p.m. bus pick up will begin at the Foggy Bottom Metro Stop and proceed to the David Taylor Model Basin.

2:30 p.m. - Tour of DTMB

4:00 p.m. - 5:30 p.m. - Picnic at the Pavillion of DTMB

5:30 p.m. & 6:00 p.m. - Buses back to Foggy Bottom Metro  
(arrive approx. 6:00 p.m. & 6:30 p.m.)

## ***Conference Banquet Thurs 13 August***

(included in registration)

J.W. Marriot at 1331 Pennsylvania Avenue, N.W. Washington, D.C. 20004

(included in registration)

Metrorail - Metro Center Stop is approximately 4 blocks away from the Marriot.

Taxi Fare approximately \$5.00

7:00 p.m. - 8:00 p.m. - Cash Bar

8:00 p.m. - Dinner - Surf and Turf

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## ***Accompanying Person's Program***

The following two special tours have been arranged for accompanying persons in addition to the general social program:

### ***Special All -Day Combination Tour #1 Mon 10 August - \$40.00***

This tour is filled with many exciting and historical points of interest. Ford's Theater, Air & Space Museum, Natural History Museum, Mount Vernon and observation of Downtown, Chinatown, the Mall, Old-Towne Alexandria Fort Washington and the Masonic Temple. Begins 7:45 a.m. Finish 5:00 p.m.

There will be a mid-day stop for lunch (meal not provided).

### ***Government in Action - Half- Day Morning Tour #2 Tues 11 August - \$24.00***

Covers the three branches of the Government: Legislative, Executive, and Judicial as well as the Smithsonian Museum of American History and the White House if available.

Begins 7:45 a.m. Finish 12:30 p.m.

# SYMPOSIUM SESSIONS

Wave-Induced Ship Motions and Loads

Viscous Ship Hydrodynamics

Wake Dynamics

Wave Hydrodynamics

Cavitation and Bubbly Flows

Propulsor Hydrodynamics/Hydroacoustics

Water Entry

Bluff Body Hydrodynamics

Shallow Water Hydrodynamics

Fluid Dynamics in the Naval Context

CFD Validation

Frontier Experimental Techniques

Hydrodynamics in Ship Design

## ***Future Information***

Symposium sessions schedule and a list of papers will be mailed in the spring to all registrants and will be posted on the World Wide Web at

<http://www50.dt.navy.mil/cent/onr22>

# REGISTRATION FORM

22nd ONR Symposium on Naval Hydrodynamics, Washington, D. C., U. S. A. 9- 14 August 1998

Both registration form and payment must be received before 30 Jun 1998 to obtain the low fee.

Please type or use block letters.

|                         |            |
|-------------------------|------------|
| Last name               |            |
| First name              |            |
| Organization/Company    |            |
| Position                |            |
| Address                 |            |
|                         |            |
| Country                 |            |
| Telephone               | Telefax    |
| E-mail                  |            |
| Accompanying person(s): |            |
| Last name               | First name |

Please mark the appropriate boxes and include payment.

Checks are payable to: NAS/ 22nd ONR Symposium

Mail To: Kay Adams, 5016, Carderock Division, Naval Surface Warfare Ctr., 9500 MacArthur  
Blvd. West Bethesda, MD 20817- 5700

| CONFERENCE FEES                                     | NO. | TOTAL |
|---|-----|-------|
| Registration fee up to 1 June \$400.00              |     |       |
| Registration fee after 1 June \$475.00              |     |       |
| Student fee \$275.00                                |     |       |
| Reception (included)                                |     |       |
| Reception (accompanying persons) \$20.00            |     |       |
| Banquet (included)                                  |     |       |
| Banquet (accompanying persons) \$75.00              |     |       |
| Picnic and Tour DTMB (included)                     |     |       |
| Picnic and Tour DTMB (accompanying persons) \$20.00 |     |       |
| Tour #1 - All Day Combination Tour \$40.00          |     |       |
| Tour #2 - Government in Action- 1/ 2 day \$24.00    |     |       |
| Tour #3 - Washington by Twilight Tour (included)    |     |       |
| Tour #3 - (Accompanying persons) \$24.00            |     |       |
| (in U.S. Dollars) TOTAL                             |     |       |



# HOTEL INFORMATION

Rooms have been reserved at three hotels in Washington, DC. The number within each price category is limited.  
 Room prices range from: Single \$108.00-\$ 110.00 + 13% tax + \$1.50/ 3.00 room tax per day and Double \$124.44-\$ 128.00 ++  
 except the GWU Inn \$124.00 all inclusive  
 Please call the hotel direct to make your reservation. You will need a credit card to guarantee your room.  
 Refer to the 22nd ONR Hydrodynamics Symposium Except at The State Plaza - Refer to Group 3535.

| Hotels                                 | Address   | Direct Phone No. &<br>Toll Free 800 No                   | Rooms                           | Cost  | Breakfast   | Amenities  | Parking   |
|--|---|--|---------------------------------|---|-------------|--|---|
| State Plaza Hotel                      | 2117 E St NW<br>Washington DC 20037                 | 202-861-8200 phone<br>1-800-424-2859<br>Group 3535       | All Suites                      | \$108++<br>Single                                 | Continental | Fitness center,<br>data ports, hair<br>dryer/iron                          | \$15 a day<br>Approx. 2 blocks<br>from NAS      |
| The River Inn                          | 924 25th St NW<br>Washington DC 20037               | 202-337-7600 phone<br>202-337-6520 fax<br>1-800-424-2741 | All suites<br>1 bed per<br>room | \$110.18++<br>Single<br>\$125.18++<br>Double      | Continental | Voice mail & data<br>port, newspaper,<br>hair dryer/iron                   | \$15 a day<br>Approx. 15-20<br>min. walk to NAS |
| Wyndham Bristol<br>Hotel               | 2430 Pennsylvania<br>Ave. NW<br>Washington DC 20037 | 202-955-6400 phone<br>202-775-8489 fax<br>1-800-822-4200 | Variety                         | \$108++<br>Single \$128++<br>Double<br>Govt. Rate | Full        | Voice mail & data<br>ports, fitness cen-<br>ter, hair dryer/iron           | \$16 a day<br>Approx. 15-20<br>min. walk to NAS |
| George Washington<br>Univ. Inn Mention | 824 New Hampshire<br>Ave. NW<br>Washington DC 20037 | 202-337-6620 phone<br>202-337-2540 fax<br>1-800-426-4455 | Variety + 5<br>for disabled     | \$124 Double<br>or Single all<br>inclusive        | No          | Newspaper,<br>nearby fitness cen-<br>ter, hair dryer/iron                  | \$15 a day<br>Approx. 15-20<br>min. walk to NAS |
| Double Tree Guest<br>Suites            | 2500 Pennsylvania<br>Ave. NW<br>Washington DC 20037 | 202-333-8060 phone<br>202-338-3818 fax<br>1-800-222-TREE | Suites                          | \$108++<br>Single<br>\$124++<br>Double            | No          | Voice mail & data<br>ports, nearby fit-<br>ness center, hair<br>dryer/iron | \$15 a day<br>Approx. 20 min.<br>walk to NAS    |
| Double Tree Guest<br>Suites            | 801 New Hampshire<br>Ave. NW<br>Washington DC 20037 | 202-785-2000 phone<br>202-785-9485 fax<br>1-800-222-TREE | Suites                          | \$108++<br>Single<br>\$124++<br>Double            | No          | Voice mail & data<br>ports, nearby fit-<br>ness center, hair<br>dryer/iron | \$15 a day<br>Approx. 20 min.<br>walk to NAS    |

### ***EXPERIMENTAL MODEL BASIN BLDG. #70***

The model Basin was designed and built in 1897-1898 under the supervision of Naval Constructor David Watson Taylor. Scale ship models were towed the length of the 470-foot basin while scientific and photographic equipment measured the effect of water on the hull. The south end of the building now houses a small Submarine Museum. Among the displays are a variety of early submarines including the 1860's Intelligent Whale and three World War II Axis mini subs. A Poseidon missile, specifically designed in the 1970s to be launched from submarines, is also displayed.

### ***THE NAVY MUSEUM BLDG. #76***

The Navy Museum, which opened in 1963 is housed in the former 600-foot long, Breech Mechanism Shop of the old Naval Gun Factory. Exhibits offer a look at the traditions and contributions of the Navy through-out American history. Popular attractions include the fully rigged fighting top from the frigate Constitution a submarine room with operating periscopes, and a number of exhibits on the role of the Navy's U.S. history.

***SUNDAY EVENING RECEPTION - 9 AUGUST 1998***

